



CASE STUDY

DISPLACING PETROL & DIESEL GENERATORS WITH SOLAR IN NIGERIA

📅 2022 – ONGOING

OUR PARTNERS



APRIL 2023



Photo: SOLAD

OBJECTIVE

Across Sub-Saharan Africa, the national electricity grid delivers power supply to a fraction of its population, with frequent power blackouts. Most households and businesses are forced to rely on expensive and polluting petrol and diesel generators as backup to an unreliable grid. Nigeria alone relies on tens of millions of generators for this purpose.

In 2022, Sustainable Energy for All (SEforALL) launched a funding round in Nigeria to help displace these generators with equivalent solar-battery systems, through the Universal Energy Facility (UEF), the multi-donor results-based financing (RBF) facility that we manage on behalf of a coalition of partners. The 'Stand-Alone Solar for Productive Use' (SSPU) programme pursues aligned objectives on energy access, climate change and development, providing clean and affordable energy to households and small businesses whilst also fast-tracking the displacement of gasoline and diesel generators, and promoting job creation and economic productivity.

PARTNERS

The Universal Energy Facility was established by SEforALL with a coalition of partners including The Rockefeller Foundation, UKaid, USAID, GIZ, Shell Foundation, Good Energies Foundation, the Carbon Trust, and the Africa Minigrid Developers Association. The Facility's SSPU programme is supported by the Global Energy Alliance for People and Planet (GEAPP), IKEA Foundation and Rockefeller Foundation. The fund relies on a digital payments platform that was developed in partnership with Odyssey Energy Solutions. For SSPU funding, the Facility works with a range of qualified renewable energy companies active in the Nigerian market.



I commend SEforALL for its commitment and for successfully kick-starting the Universal Energy Facility to advance our nation's effort on improved access to clean energy.



AHMAD SALIHJO

Managing Director, Rural Electrification Agency, Nigeria



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TECHNOLOGIES SUPPORTED

Our project supports 100% solar and battery energy storage solutions with the capacity to replace gasoline and diesel generators on a one-for-one basis.

OUR ROLE

SEforALL acts as the programme and fund manager for the UEF. We worked to develop the standard operating procedures for the fund, and to build partnerships with renewable energy associations in Nigeria and across Africa (the UEF is active in five countries at the time of writing). We coordinated with a community of donors and practitioners of results-based financing through an 'RBF Leadership Group' and consulted on the design and development of the fund's implementation framework. Together with our partners, SEforALL mobilized a first round of funding of USD 10 million to support ten renewable energy companies to deploy over 3,500 electricity connections in Nigeria.

RESULTS

The SSPU programme's 2022 launch in Nigeria immediately received applications from qualified project developers to deliver over 25,000 solar battery connections to customers, displacing

thousands of backup generators and avoiding over 33,000 tonnes of carbon dioxide equivalent (tCO₂e) greenhouse gas emissions per annum.

In February 2023, we signed grant agreements with ten of these companies for a total of USD 10 million in grant funding available, leaving an immediate opportunity to fund a further 20 qualified companies on a 'wait-list' with viable solar projects that could deliver an additional 22,000 new electricity connections within the next two years.



Nigeria is a clear example of success and commitment. We managed to put together local authorities, donors, investors and developers working together to displace petrol and diesel generators with reliable and clean solar energy technologies, all of this with the ultimate goal of improving people's lives.



ANITA OTUBU

Senior Director, Universal Energy Facility, SEforALL





NEXT STEPS

SEforALL is working with its partners to mobilize additional funding to enable the expansion of the SSPU programme in Nigeria and additional countries (exploring Indonesia and Uganda). We are also working to explore ways that the UEF can channel climate finance to decentralized renewables and clean cooking, for example through carbon markets finance and generation of Renewable Energy Certificates.



The Universal Energy Facility helps us supply power to rural communities, especially to female traders and to health centres. It can be quite expensive for companies and individuals to have solar installed, and the UEF's grant funding allows us to reduce the up-front costs to people.



SALEWA ISAAC

PAM Africa, a Nigerian project developer.

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VOICES FROM UEF COMMUNITIES



I have been in this market since 1982. We trade among ourselves peacefully, but we don't have electricity now. We used to have a lot of people selling frozen food, but many businesses shut down and some even took their freezers home. Our market would be better developed if we had reliable power.



ALHAJA TAOFEEKAT ABIODUN ALLISON

Iyaloja of Ayangburen Market



Without electricity I cannot press clothes or power my appliances. We're having to switch back to manual sewing machines, which is really stressful and delays deliveries to our customers. We have a diesel generator, but its capacity has limits, it's noisy and the smoke harms our eyes. Moreover, we're spending a lot of money on fuel, which reduces our profit.



RUTH BADEJO

Fashion Designer, Ayangburen Market



We've not had electricity here for three years. Business hasn't been the same. I use the generator every day and we're tired. It develops faults frequently, sometimes even when I'm cutting hair and I have to take the customer to another shop to complete the job.



IDRIS AMINU ADELEKE

Barber, Ayangburen Market



Having the UEF as a multi-donor, results-based financing facility successfully operating in Nigeria is very important for us. The work of the UEF in clean energy and its impact on climate change strengthens our efforts towards promoting and attracting investments in the energy sector to enhance infrastructural and socio-economic development for wealth and job creation, particularly in Lagos State.



OLALERE ODUSOTE

Commissioner for Energy and Mineral Resources, Lagos State



ABOUT SEFORALL

Sustainable Energy for All (SEforALL) is an independent international organization that works in partnership with the United Nations and leaders in government, the private sector, financial institutions, civil society and philanthropies to drive faster action on Sustainable Development Goal 7 (SDG7) – access to affordable, reliable, sustainable and modern energy for all by 2030 – in line with the Paris Agreement on climate change.

SEforALL works to ensure a clean energy transition that leaves no one behind and brings new opportunities for everyone to fulfil their potential. Learn more about our work at www.SEforALL.org.

